SECTION 5 – MITIGATION MONITORING PROGRAM

2 **5.1 Authority**

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3 CEQA directs Lead Agencies to adopt, concurrent with adoption of an MND, a program 4 for reporting or monitoring the changes that have been incorporated into the project or that have been made a condition of approval to mitigate or avoid significant 5 6 environmental effects. This proposed Mitigation Monitoring Program (MMP) has been 7 prepared to provide a summary and discussion of the ways in which the CSLC, as the 8 Lead Agency for the Project, would ensure the measures identified in the MND are 9 implemented, and identifies other agencies potentially having enforcement and compliance responsibilities. While the MMP may identify other public agencies with 10 oversight or permitting jurisdiction, until the mitigation measures have been completed. 11 12 the CSLC would remain responsible for ensuring all measures are implemented in accordance with the MMP. Should the CSLC adopt the MND after considering it 13 14 together with any comments received during the public review process, it would adopt a final MMP in compliance with CEQA. (See Pub. Resources Code § 21081.6, subd. (a): 15 State CEQA Guidelines, §§ 15074, subd. (d), 15097) 16

5.2 Mitigation Compliance Responsibility

PG&E is responsible for successfully implementing all the Applicant Proposed Measures (APMs) and mitigation measures (MMs) in the MMP, and is responsible for assuring that these requirements are met by all of its construction contractors and field personnel. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation measures may be imposed by applicable agencies with jurisdiction through their respective permit processes.

5.3 General Monitoring and Reporting Procedures

The CSLC and the environmental monitor(s) are responsible for integrating the 26 mitigation monitoring procedures into the project implementation process in coordination 27 with PG&E. To oversee the monitoring procedures and to ensure the required measures 28 29 are implemented properly, the environmental monitor assigned must be on site during any portion of project implementation that has the potential to create a significant 30 31 environmental impact or other impact for which mitigation is required. The 32 environmental monitor is responsible for ensuring that all procedures specified in the 33 MMP are followed.

Site visits and specified monitoring procedures performed by other individuals will be reported to the assigned environmental monitor. A monitoring record form will be submitted to the environmental monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the environmental monitor. A checklist will be developed and maintained by the environmental monitor to track all procedures required for each mitigation measure and

- 40 to ensure that the timing specified for the procedures is adhered to. The environmental
- 41 monitor will note any problems that may occur and take appropriate action to rectify the
- 42 problems.

43 **5.4 Mitigation Monitoring Table**

- The following mitigation monitoring table lists all APMs and MMs identified in Section 3
- of the MND. The table lists the following information, by column:
- Potential Impact;
- Mitigation Measure;
- Location;
- Monitoring/reporting action;
- Responsible agency; and
- Timing.

 Table 5-1. Mitigation Monitoring Program

Potential Impact	Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
Fuel or petroleum spill	APM-1. Vessel fueling shall only occur at an approved docking facility. No cross vessel fueling shall be allowed. Marine vessels generally will contain petroleum products within tankage that is internal to the hulls of the vessels.	In- and over- water	Compliance monitoring	California State Lands Commission (CSLC)	Throughout installation period
	APM-5. Onboard spill response equipment and contracted services shall be sufficient to contain and recover the worst-case scenario spill of petroleum products.	In- and over- water	Compliance monitoring	CSLC	Throughout installation period
Marine wildlife interactions	APM-2. Project installation schedule shall be limited to June-July to avoid gray whale migration periods and when weather conditions are conducive to expeditious and safe vessel operations.	Project area	Compliance monitoring	CSLC	Throughout installation period
	APM-4 . All operations shall be completed during the daytime hours; no nightime operations are proposed.	Project area	Compliance monitoring	CSLC	Throughout installation period
	APM-7 . A qualified marine wildlife observer shall be onboard the <i>MV Michael Uhl</i> during the deployment of the Ocean Bottom Seismometer (OBS) units and cable. That observer shall monitor and record the presence of marine wildlife (mammals and reptiles) and shall have the authority to cease operations if the actions are resulting in potentially significant impacts to wildlife.	Project area	Compliance monitoring	CSLC	Throughout installation period
	APM-9. The Applicant shall implement the marine wildlife contingency plan for Ocean Bottom Seismometer (OBS) deployment, cable lay, and equipment recovery that includes measures to reduce the chance of vessel/marine mammal and reptile interactions (see Appendix H). This Plan includes: (1) the provision for marine mammal monitors approved by the National Oceanic and Atmospheric Administration Fisheries Service or CSLC staff to be onboard the OBS/cable installation vessel throughout the daytime marine operations; and (2) measures that (a) specify the distance, speed, and direction transiting vessels would maintain when in proximity	Project area	Compliance monitoring	CSLC	Throughout installation period

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Potential Impact	Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	to a marine mammal or reptile; (b) qualifications, number, location, and authority of onboard marine mammal and reptile monitors; and (c) reporting requirements in the event of an observed impact to marine wildlife.				
Habitat damage	APM-3. The cable has been routed to avoid rocky substrate wherever possible. Two pre-construction remotely operated vehicle (ROV) surveys of the rock habitat expected to be crossed by the cable have been conducted and information collected has been used to avoid potential impacts.	Rocky habitats along cable route	Completed. with results incorporated into MND	CSLC	Completed
	APM-6. To reduce the area of seafloor disturbance, no vessel anchoring is proposed, and the cable between the long-term OBS units shall not be manually buried into the sediment or trenched through the rocky substrate.	Project area	Compliance monitoring	CSLC	Throughout installation period
	APM-8. All Ocean Bottom Seismometer (OBS) units shall be located on sedimentary seafloor habitat. All Project-related material, including concrete ballast tubes, shall be removed from the seafloor after data collection is completed.	Project area	Compliance Monitoring	CSLC	Throughout installation period
	APM-10. To avoid rock features, a 275 m- (902 ft) long section of the cable from 200 m (656 ft) northwest of Station 5 to 75 m (246 ft) southeast of Station 4 shall be moved 50 m (164 ft) east of the proposed alignment, as shown in Figure 4 in Appendix I, December 2011 ROV Survey – Summary Report.	Rocky habitats along cable route	Compliance Monitoring	CSLC	Throughout installation period
	MM BIO-1 . The Applicant shall comply with the requirements identified in the Scientific Collecting Permits for activities in the Point Buchon Marine Protected Area.	MPA	Reporting	California Department of Fish & Game	Throughout installation period
	MM BIO-2. The Applicant shall install the cable in such a way as to avoid areas of rocky substrate whenever feasible and perform a post-installation ROV survey upon completion of cable installation activities. The survey will document the length of cable in areas of rocky substrate and the actual amount of rocky substrate and number of organisms affected by the cable placement. A CSLC staff-approved marine biologist shall be onboard the post-lay ROV survey vessel to	Project area	Compliance monitoring	CSLC	Post Installation

Potential Impact	Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
	observe and record the effects of cable lay operations on the seafloor substrates and the biota along the entire cable route and at each OBS unit. The Applicant shall subsequently prepare a technical report and shall submit the report and video of the ROV survey to the CSLC and California Department of Fish and Game (CDFG) staffs within 90 days following the ROV survey. The report shall include all of the following: • Quantification (in square meters) of seafloor impacts and estimated numbers and species of organisms affected as well as a map of the survey route noting the location of the impacted areas included in this quantification and the video timestamp of each relevant site in the ROV survey video;				
	 A restoration proposal that is based on the results of the survey and proportional to the actual amount of soft substrate and rocky habitat affected. The proposal shall contain direct restoration actions that repair or restore affected areas and/or a contribution to an ongoing restoration program in the area (e.g., SeaDoc Society Lost Fishing Gear Recovery Project), as specified by the CSLC or CDFG staffs (and/or other requesting agencies); and A schedule for implementing and completing the required restoration. 				

Potential Impact	Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
Fisheries	MM FISH-1. At the beginning of each day that in-water operations are to occur, observations shall be made along the proposed cable route and the presence of in-place commercial fishing gear located within 30 meters (100 feet) of the OBS site and/or cable route shall be noted. The vessel operator shall notify the owner of the gear and request that the gear be removed and/or the cable will be re-routed to avoid the existing gear by at least 30 meters (100 feet).	Project area	Compliance monitoring	CSLC	Throughout installation period
	MM FISH-2. Upon Project completion and removal of the Ocean Bottom Seismometer (OBS) units and cable, the Applicant shall survey each OBS site and the cable route, submit a report to California State Lands Commission (CSLC) staff documenting the condition of any Project-related materials left on the seafloor, and remove, within 6 months after Project completion, any Project-related materials that CSLC staff determines pose a hazard to commercial fishing operations.	Project area	Reporting	CSLC	Upon Project completion

Potential Impact	Mitigation Measure	Location	Monitoring/ Reporting Action	Agency Responsible	Timing
Air Quality	 MM AIR-1. The Applicant shall implement Standard Control Measures for Construction Equipment, which include: Maintain all construction equipment in proper tune according to manufacturer's specifications; Fuel all off-road and portable diesel-powered equipment with California Air Resources Board (CARB)-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road); Use diesel construction equipment meeting CARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation; Use on-road heavy-duty trucks that meet CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation; Construction or trucking companies that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g., captive or Nitrogen Oxides [NO_x]-exempt area fleets) may be eligible by proving alternative compliance; All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the 5-minute idling limit; Diesel idling within 300 meters (1,000 feet) of sensitive receptors is not permitted; Staging and queuing areas shall not be located within 300 meters (1,000 feet) of sensitive receptors; Electrify equipment when feasible; Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and, Use alternatively fueled construction equipment onsite where feasible, such as compressed natural gas, liquefied natural gas, propane or biodiesel. 	area	Compliance monitoring	Air Pollution Control District	During installation period Project